COMMITTEE ON SCIENCE
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National Science Foundation Budget and Management Challenges

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Statement of Chairman Bob Inglis

I want to welcome everyone and thank you for coming to this morning's hearing – the first Research Subcommittee hearing of the 109th Congress. I want to extend a special welcome to my esteemed colleague Congresswoman Hooley, who is the new ranking member of the Subcommittee. I am glad that the Science Committee works in such a bipartisan way, and I look forward to working with Ms. Hooley.

I recently spoke to an executive for General Electric. When I asked him if he had enough qualified engineers to fill his research jobs, he said "No." He could hire 300 tomorrow if they were available. The core problem is teachers. There just aren't enough qualified and inspiring teachers to produce the scientists and engineers his company needs.

He also told me about the technology that they are using in their gas turbines—technology that is currently unique in the world. GE depends on their ability to innovate to be competitive. For most American companies, innovation is their only edge. To continue to win in this world of commerce, we must continue to create new and improved technologies. If we want to lead the world in innovation, we must train the PhD's whose basic research fuels technological innovation in decades to come.

Basic research is the lifeblood of innovation. It used to be that our large companies did the basic research—companies like Bell Labs, IBM, and Xerox. They were supplemented by the work of the DOE, DOD, and NSF. Now, market pressures and shifting government priorities have pushed the burden almost entirely to the federal government, and, increasingly, NSF. Without NSF supporting basic research, our edge in science will slip away and an innovation gap will grow.

That's why I'm so concerned about the current NSF budget. Although there is a slight increase this year, it doesn't make up for last year's cuts, and is still below the FY04 level. It is also now far from the Congress' promise to double the NSF budget over five years. On my previous stint in Congress, I was on the Budget Committee and I was quite concerned about our budget deficit. I learned during those years that getting it balanced requires spending restraint and economic growth. We've got to stop spending and start investing. Investing in basic and applied science research makes sense. If we invest wisely, we can find economic growth through innovation.

We also have to train more scientists and engineers. We have to continue the stream of exciting innovations that save lives and improve our quality of life. Just as it would be short-sighted for a company to not plan the next generation of products, it would be irresponsible of us to neglect future research in basic science. It's more important than ever because it is the foundation of our innovation economy.

The NSF has been a key force for innovation, from the MRI to barcode scanners, from the creation of the Internet to the origins of Google. The NSF has a track record of accountability and a focus on excellence, and we have to seek continuous improvement. The standard for us is higher because the nature of the work is harder for many to understand.

I wonder about the cuts in math and science education, and indications that some NSF activities may be "migrating" to the Department of Education. The NSF has a passion for excellence, while the Department of Education is arguably focused on proficiency. Passion isn't easily transferred. Are we investing enough in research? Or are we simply spending on current needs? If we continue down this path, where will we be positioned in the global economy in twenty years? Will the modifications to merit review ultimately reduce the quality of submissions? Also, what are the appropriate costs for Coast Guard icebreaking services, and are these activities best funded through NSF? These are challenging questions, and I'm hopeful that we can get some answers today.